

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

YOSHIHIKO TOYODA

Application No.: Unknown

Filed: June 28, 2001

For: SEMICONDUCTOR
DEVICE AND
MANUFACTURING
METHOD THEREOF

Art Unit: Unknown

Examiner: Unknown

Pre amend
3/A
9-17-01
LL

PRELIMINARY AMENDMENT

Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

Prior to the examination of the above-identified patent application, please enter the following amendments and consider the following remarks.

IN THE SPECIFICATION:

Replace the paragraph beginning at page 1, line 31 with:

Referring to Fig. 41, a thick Cu film 105 deposited on the entire surface by electrolytic plating in a plating liquid of a copper sulfate bath, and embedded in the respective grooves 102a, 102b. At this time, the depositing rate is faster in narrow sections such as narrow grooves and holes 102b than in wide grooves 102a and flat face portions due to the effects of additives added in the plating liquid. As a result, the embedding is preferentially carried out in these portions, and thus, it is possible to obtain a superior embedding property. Moreover, the Cu film 105 deposited outside the grooves 102a, 102b is removed by a chemical mechanical polishing method (CMP method), thereby providing the semiconductor device shown in Fig. 38

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